

ORDINANCE NO. 2655

AN ORDINANCE OF THE CITY OF REDDING AMENDING REDDING MUNICIPAL CODE TITLE 16 (BUILDINGS AND CONSTRUCTION), CHAPTER 16.02 (BUILDING CODE) BY AMENDING SECTION 16.02.010 (CALIFORNIA BUILDING CODE ADOPTED); CHAPTER 16.03 (RESIDENTIAL CODE) BY AMENDING SECTION 16.03.010 (CALIFORNIA RESIDENTIAL CODE ADOPTED); CHAPTER 16.04 (MECHANICAL CODE) BY AMENDING SECTION 16.04.010 (CALIFORNIA MECHANICAL CODE ADOPTED); CHAPTER 16.05 (PLUMBING CODE) BY AMENDING SECTION 16.05.010 (CALIFORNIA PLUMBING CODE ADOPTED); CHAPTER 16.06 (ELECTRICAL CODE) BY AMENDING SECTION 16.06.010 (CALIFORNIA ELECTRICAL CODE ADOPTED); CHAPTER 16.07 (ENERGY CODE) BY AMENDING SECTION 16.07.010 (CALIFORNIA ENERGY CODE ADOPTED); CHAPTER 16.08 (GREEN BUILDING STANDARDS CODE) BY AMENDING SECTION 16.08.010 (CALIFORNIA GREEN BUILDING STANDARDS CODE ADOPTED); CHAPTER 16.09 (HOUSING CODE) BY AMENDING SECTION 16.09.010 (INTERNATIONAL MAINTENANCE CODE ADOPTED), AND MAKING FINDINGS OF FACTS RELATING TO LOCAL CLIMATIC, GEOLOGICAL, AND TOPOGRAPHIC CONDITIONS, ALL RELATING TO THE ADOPTION OF THE CALIFORNIA BUILDING STANDARDS CODES

THE CITY COUNCIL OF THE CITY OF REDDING DOES ORDAIN AS FOLLOWS:

Section 1. The City Council of the City of Redding makes the following findings of fact necessary for changes or modifications to the 2022 State Building Standards Code due to local conditions existing in the City of Redding:

- A. **Changes or Modifications.** Pursuant to Section 17958.5, 17958.7 and 18941.5 of the State of California Health and Safety Code, the City of Redding adopts and amends the 2022 edition of the California Building Code, the 2022 edition of the California Residential Code, the 2022 edition of the California Plumbing and Mechanical Codes, the 2022 edition of the California Electrical Code, the 2022 edition of the California Green Building Code and the 2021 edition of the International Property Maintenance Code as they pertain to the regulation of buildings and structures.
- B. **Findings.** Pursuant to Sections 17958.5, 17958.7 and 18941.5 of the State of California Health and Safety Code, the City of Redding has determined and finds the changes or modifications noted herein are needed and are reasonably necessary because of local climatic, geological, and topographic conditions.
- C. **Local Conditions.** Local conditions have an adverse effect on the potential for life and property loss, making necessary changes or modifications to the 2022 California State

Building Standards Code in order to establish and maintain an environment which will provide the community a desirable level of protection.

Below are listed adverse local climatic, geological, and topographic conditions:

1. **Climatic.**

- a. **Precipitation.** The normal rainfall for the City of Redding is approximately 33.6 inches annually. Winter storms are responsible for the heaviest intensity of precipitation, with two-thirds of the rain coming between December and March and 15 percent between April and June. The City typically experiences snow once or twice a year, with depth of less than a foot. Snow depths have attained 18" or more at least twice in the last 100 years. In both cases, there were building failures due to the weight of the snow. Snow in Redding is typically wet and is frequently rained upon. Drifting snows have not been an issue within the City.
- b. **Temperature.** Summer sunshine is abundant in the Redding area, with over 39 days a year with temperatures of 100 degrees or higher. The Northern California valley sees approximately 200 days of clear skies, with May through September having temperature ranges between 95 and 115 degrees. Winter temperatures occasionally dip below freezing at night.

2. **Geological and Topographic.**

- a. The City of Redding is located in Shasta County in Northern California. It is approximately 100 miles south of the Oregon border and 160 miles north of Sacramento. Redding's population in 2010 was approximately 90,000, which makes Redding the largest city in Shasta County, along with being the largest city in California north of Sacramento.

The City encompasses approximately 61 square miles, was founded in 1872, and incorporated in 1887. Much of the downtown area is comprised of construction dating back to the late 1800s and the early 1900s.

Soil conditions often consist of varying types of soils at different depths, leading to saturated soil conditions during winter rains and underground migration of water at all times of the year.

- b. The City consists of flat lands, hills, valleys, and ridges. The flatter areas are found in the southeast portion of the City. Most of the existing commercial areas are on relatively flat land.

Residential development occurs in the hilly areas on the west and northeast portions of the City. The majority of the hills in these areas have slopes

ranging from 15 to 30 percent. The steeper slopes, west and north of the City, are planned for open-space use.

Elevations are varied within the City and may be 500 feet to 1,000 feet above sea level.

- c. The relatively young geological processes that have created earthquakes in California are also active today in Redding. The largest recorded earthquake in the Redding area occurred in 1940, at 5.7 on the Richter scale, and the last in 1998, with a 5.2 on the Richter scale. The ASCE 7 Hazard Tool indicates probabilistic peak ground accelerations (PGA) of 57%g based on design assumptions of a Risk Category II building and a default site soil classification of "D – Stiff Soil". These are conservative assumptions and typical for buildings within the City's jurisdiction.

- D. **Summary.** The above local climatic, geologic, and topographic conditions create the potential for excessive water below building slabs, snow loads, and increased seismic hazards. There is a history of problems due to water migration up through floor slabs and into the interior space of buildings in the area as well as failures due to snow loads.

As a result of this "findings of fact," which identifies the various climatic, geological, and topographical elements, the requirements established by the City of Redding within the adopted Redding City ordinances are considered "reasonable and necessary" based on the following:

1. Climatic, geologic, and topographical conditions necessitate the control of moisture migration into buildings.
2. Geologic conditions necessitate proper design for seismic accelerations.
3. Climatic conditions necessitate proper design criteria for snow loads.

Conclusion

Local climatic, geologic, and topographic conditions impact the built environment and necessitate amendments to the California Building Standards Code.

Therefore, it is found to be reasonably necessary that the State Building Standards Code be changed or modified to mitigate the effects of the above conditions. Furthermore, California Health and Safety Code Section 17958.7 requires that the modification or change be expressly marked and identified as to each finding to which it refers. Therefore, the City of Redding finds that the following table provides code sections that have been modified pursuant to the ordinance that are building standards as defined in the Health and Safety Code Section 18909 and the associated referenced conditions or modifications due to local climatic, geological, and topographical reasons:

CBC SECTION NO. LOCAL CLIMATIC, GEOLOGICAL, AND TOPOGRAPHICAL CONDITIONS

1608	1a
1613.3.5	2c
1613.3.5.2	2c
1807.1.5	2c
1807.1.6	2c
2308.4.6	1a

CRC SECTION NO. LOCAL CLIMATIC, GEOLOGICAL, AND TOPOGRAPHICAL CONDITIONS

R301.2.2.1.1	2c
R313.2.1.1	1b, 2a
R313.2.2	1b, 2a
R313.2.3	1b, 2a
R404.1.4.1	2c
R404.1.4.2	2c
R506.2.3	1a, 2a

CGBC SECTION NO. LOCAL CLIMATIC, GEOLOGICAL, AND TOPOGRAPHICAL CONDITIONS

4.505.2.1(1)	1a, 2a
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Section 2. Title 16 (Buildings and Construction), Chapter 16.02 (Building Code), Section 16.02.010 of the Redding Municipal Code is hereby amended to read as follows:

16.02.010 - California Building Code adopted.

- A. That certain document, a copy of which is on file and open for inspection in the City of Redding permit center, marked and designated as "California Building Code (CBC), 2022 Edition, Volumes 1 and 2," published by the International Code Council, is adopted as the building code of the City and is included in and made a part of this code as though set forth at length herein.
1. California Code of Regulations, Title 24, Part 2, California Building Code, Appendix O, Emergency Housing, is adopted as though set forth at length herein excluding therefrom any requirement that an emergency sleeping cabin shall not be less than seventy (70) square feet of interior floor area for one occupant and fifty (50) square feet for each occupant in excess of one (1), and, in lieu of said requirement, establishing that an emergency sleeping cabin shall not be less than sixty-four (64) square feet of interior floor area for one occupant and one hundred (100) square feet for two occupants.

- B. Snow load CBC Section 1608 is replaced by the following:
1608.1 General. Design snow loads shall be determined by the Building Official.
- C. Add the following exception to CBC Section 1613.2.5:
Exception: Structures not assigned to Seismic Design Category E or F above shall be assigned to Seismic Design Category D.
- D. Add the following exception to CBC Section 1613.2.5.2:
Exception: Seismic Design Category shall be determined per exception to Section 1613.2.5.
- E. Delete CBC Section 1807.1.5 Exception.
- F. Delete CBC Section 1807.1.6.
- G. Amend CBC Section 2308.4.6 to read:
Floor, attic, and roof framing shall be laterally supported in accordance with AF & PA NDS Section 4.4.1.2.

Section 3. Title 16 (Buildings and Construction), Chapter 16.03 (Residential Code), Section 16.03.010 of the Redding Municipal Code is hereby amended to read as follows:

16.03.010 - California Residential Code adopted.

- A. That certain document, a copy being on file and open for inspection in the City of Redding permit center, marked and designated as "California Residential Code (CRC), 2022 Edition," published by the International Code Council, is adopted as the residential building code of the City and is included in and made a part of this code as though set forth at length herein.
 - 1. California Code of Regulations, Title 24, Part 2.5, California Residential Code, Appendix AZ, Emergency Housing is adopted as though set forth at length herein excluding therefrom any requirement that an emergency sleeping cabin shall not be less than seventy (70) square feet of interior floor area for one occupant and fifty (50) square feet for each occupant in excess of one (1), and, in lieu of said requirement, establishing that an emergency sleeping cabin shall not be less than sixty-four (64) square feet of interior floor area for one occupant and one hundred (100) square feet for two occupants.
- B. Add the sentence "SDS shall be taken as greater than 0.50" to the end of California Residential Code Section R301.2.2.1.1.
- C. Section R313.2.1.1 - Other Occupancies.

Section R313.2.1.1 is added to read as follows:

Group S occupancies constructed on private residential zoned parcels shall be designed to NFPA 13D as approved by the fire code official.

D. Section R313.2.2 – Additions.

Section R313.2.2 is added to read as follows:

Additions to any existing California Residential Building Code regulated buildings that increase the existing square footage by 50% or more shall meet the requirements for a newly constructed building. All additions to any existing California Residential Building Code regulated building with an existing automatic sprinkler system regardless of size shall be required to extend the sprinkler system into the addition per Section R313.2.

E. Section R313.2.3 – Remodels, alterations, or repairs.

Section R313.2.3 is added to read as follows:

For remodels, alterations, or repairs to an existing California residential Building Code regulated building involving demolition, removal, alteration, or repair of more than 50% of the structure, the building shall meet the requirements for a newly constructed building. For purposes of this section, “50%” threshold shall be applied if the project involves any of the following:

1. The removal, demolition, or repair of more than 50% of the exterior weight bearing walls; or
2. The removal, demolition or repair of more than 50% of the roof structure (including the framing, sheathing, and roof covering of a building but not limited to rafters, trusses, beams, purlins); or
3. Where the removal, demolition or repair is deemed by the fire code official to be more than 50% of the structure.

F. Amend CRC Section R404.1.4.1 to read:

Masonry foundation walls. In buildings assigned to Seismic Design Category D0, D1, or D2, as established in Table R301.2(1), masonry foundation walls shall comply with this section. In addition to the requirements of Table R404.1.1(1), plain masonry foundation walls shall comply with the following:

1. Wall heights shall not exceed 4 feet (1219 mm).
2. Unbalanced backfill height shall not exceed 3 feet (914 mm).

3. Minimum nominal thickness for plain masonry foundation walls shall be 8 inches (203mm).
4. Masonry stem walls shall have a minimum vertical reinforcement of one No. 3 (No. 10) bar located a maximum of 4 feet (1219mm) on center in grouted cells.
5. Vertical reinforcement shall be tied to the horizontal reinforcement in the footings.

Foundation walls in buildings assigned to Seismic Design Category D0, D1 or D2, as established in Table R301.2(1), supporting more than 3 feet (914 mm) of unbalanced backfill or exceeding 4 feet (1219 mm) in heights shall be constructed in accordance with the provisions of ACI 530/ASCE 5/TMS 402 or NCMA TR68-A. Masonry foundation walls shall have two No. 4 (No. 13) horizontal bars located in the upper 12 inches (305mm) of the wall.

G. Amend CRC Section R404.1.4.2 to read:

R404.1.4.2 Concrete foundation walls. In buildings assigned to Seismic Design Category D0, D1 or D2, as established in Table R301.2(1), concrete foundation walls that support light-frame walls shall comply with this section, and concrete foundation walls that support above-grade concrete walls shall comply with ACI 318, ACI 332 or PCA 100 (see Section R404.1.3). In addition to the horizontal reinforcement required by Table R404.1.2(1), plain concrete walls supporting light-frame walls shall comply with the following:

1. Wall height shall not exceed 4 feet (1219 mm).
2. Unbalanced backfill height shall not exceed 3 feet (914 mm).
3. Minimum thickness for plain concrete foundation walls shall be 6 inches (152 mm).

Foundation walls supporting more than 2 feet (1219 mm) of unbalanced backfill or exceeding 3 feet (2438 mm) in height shall be provided with horizontal reinforcement in accordance with Table R404.1.2(1), and not less than No. 4 (No. 13) vertical bars at a spacing not exceeding 48 inches (1219 mm).

H. Amend the first sentence of CRC Section R506.2.3 to read:

Vapor retarder. A 15-mil polyethylene or approved equivalent vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

Section 4. Title 16 (Buildings and Construction), Chapter 16.04 (Mechanical Code), Section 16.04.010 of the Redding Municipal Code is hereby amended to read as follows:

16.04.010 - California Mechanical Code adopted.

- A. That certain document, a copy being on file and open for inspection in the City of Redding permit center, marked and designated as "California Mechanical Code, 2022 Edition," is adopted as the mechanical code of the City and is included in and made a part of this code as though set forth at length herein.
- B. As an amendment to the California Mechanical Code, Sections 104.3.2 and 104.5 and Table 104.5 regarding fees are deleted from this code.

Section 5. Title 16 (Buildings and Construction), Chapter 16.05 (Plumbing Code), Section 16.05.010 of the Redding Municipal Code is hereby amended to read as follows:

16.05.010 - California Plumbing Code adopted.

- A. That certain document, a copy of which is on file in the City of Redding permit center, marked and designated "California Plumbing Code, 2022 Edition," is adopted as the plumbing code of the City, and is included in and made a part of this code as though fully set forth at length herein.
- B. As an amendment to the California Plumbing Code, Sections 104.3.2 and 104.5 and Table 104.5 regarding fees is are deleted from this code.

Section 6. Title 16 (Buildings and Construction), Chapter 16.06 (Electrical Code), Section 16.06.010 of the Redding Municipal Code is hereby amended to read as follows:

16.06.010 - California Electrical Code adopted.

That certain document, a copy being on file and open for inspection in the City of Redding permit center, marked and designated "California Electrical Code, 2022 Edition," is adopted as the electrical code of the City, and is included in and made a part of this code as though set forth at length herein.

Section 7. Title 16 (Buildings and Construction), Chapter 16.07 (Energy Code), Section 16.07.010 of the Redding Municipal Code is hereby amended to read as follows:

16.07.010 - California Energy Code adopted.

That certain document, a copy being on file and open for inspection in the City of Redding permit center, marked and designated as "California Energy Code, 2022 Edition," published by the International Code Council, is adopted as the energy code of the City and is included in and made a part of this code as though set forth at length herein.

Section 8. Title 16 (Buildings and Construction), Chapter 16.08 (Green Building Standards Code), Section 16.08.010 of the Redding Municipal Code is hereby amended to read as follows:

16.08.010 - California Green Building Standards Code adopted.

- A. That certain document, a copy being on file and open for inspection in the City of Redding permit center, marked and designated as "California Green Building Standards Code, 2022 Edition," is adopted as the green building standards code of the City and is included in and made a part of this code as though set forth at length herein.
- B. Amend Section 4.505.2.1 (1) to read:

A 4-inch (101.6mm) thick base of ½ inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier consisting of 15mil polyethylene sheeting, or an approved equivalent, in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.

Section 9. Title 16 (Buildings and Construction), Chapter 16.09 (Housing Code), Section 16.09.010 of the Redding Municipal Code is hereby amended to read as follows:

16.09.010 – International Property Maintenance Code adopted.

- A. That certain document, a copy being on file and open for inspection in the City of Redding Permit Center, marked and designated as "International Property Maintenance Code, 2021 Edition," published by the International Code Council, is adopted as the housing code of the City and is included in and made a part of this code as though set forth at length herein.
- B. Section 111.1 is amended as follows:

SECTION 111.1 – UNSAFE STRUCTURES AND EQUIPMENT Unsafe Conditions. When a structure, premise or equipment is found by the code official to be unsafe, or when a structure is found unfit for human occupancy, or is found unlawful, such structure, premise or equipment shall be deemed immediately dangerous, dangerous, or substandard pursuant to the following provisions and the provisions of Chapter 1.15 of the Redding Municipal Code.

- C. Section 111.4 is amended as follows:

SECTION 111.4 - Notice. Whenever the code official has evaluated a structure, premises or equipment under the provisions of the section, notice shall be posted in a conspicuous place in or about the structure affected by such notice and served on the owner, owner's authorized agent or the person or persons responsible for the structures or equipment in accordance with Title 1.15 of the Redding Municipal Code.

- D. Section 111.7 is amended as follows:

SECTION 111.7 - Placarding. Upon failure of the owner, owner's authorized agent, or person responsible to comply with the notice provisions within the time given, the code official shall post on the premises or on defective equipment a placard stating the condition of the premise or equipment and a statement regarding the occupancy of the premise, operating the equipment or removing the placard.

E. Section 111.7.1 is amended as follows:

SECTION 111.7.1. The code official shall remove the placard whenever the defect or effects upon which the placarding actions were based have been eliminated. Any person who defaces or removes a placard without the approval of the code official shall be subject to the penalties provided by this code.

F. Section 111.8 is deleted.

G. Section 113.2 is deleted.

H. Section 110.4 is amended as follows:

SECTION 110.4 - Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to citations and fines in accordance with Chapter 1.13 of the Redding Municipal Code.

Section 10. Severability. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of the ordinance. The City Council of the City of Redding hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause and phrase thereof irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases may be held invalid or unconstitutional.

Section 11. The passage of this ordinance is not a "project" according to the definition in the California Environmental Quality Act, and therefore is not subject to the provisions requiring environmental review.

Section 12. This ordinance shall take effect thirty (30) days after the date of its adoption, and the City Clerk shall certify to the adoption thereof and cause publication according to law.

I HEREBY CERTIFY that the foregoing ordinance was introduced and read by the City Council of the City of Redding at a regular meeting on the 15th day of November, 2022, and was duly read and adopted at a regular meeting on the 6th day of December, 2022, by the following vote:

AYES: COUNCIL MEMBERS: Audette, Mezzano, Munns, Winter, and Dacquisto
NOES: COUNCIL MEMBERS: None
ABSENT: COUNCIL MEMBERS: None
ABSTAIN: COUNCIL MEMBERS: None

/s/ Michael Dacquisto
MICHAEL DACQUISTO, Mayor

ATTEST:

FORM APPROVED:

/s/ Pamela Mize
PAMELA MIZE, City Clerk

/s/ Barry E. DeWalt
BARRY E. DeWALT, City Attorney